

REMARKS/ARGUMENTS

By this Supplemental Amendment, claims 2-9 have been cancelled and have been replaced by new claims 10-19. New independent claims 10 and 13 contain none of the informalities identified by the Examiner in the outstanding Official Action, and as a result, the rejection under 35 U.S.C. § 112, second paragraph, has been rendered moot.

With respect to the Section 102(e) anticipation rejection based on U.S. publication 2002/0016396A1 to Wong et al., the remarks submitted with the Amendment of May 24, 2006, are hereby incorporated by reference. While new claims 10 and 13 (generally similar to claims 2 and 4 as amended in the response of May 24, 2006), refer to electrically insulating material as opposed to electrically insulating resin, the Wong et al. reference relied upon by the Examiner neither discloses nor suggests the steps included in new independent claim 10 that call for applying the mixture onto a compound film by means of electrostatic spraying in order to obtain a coated film, whereby the metallic foil acts as a counter electrode, with the electrostatic spraying generating an electric field; and forming geometrically exact layers and field-aligning said nano-particles by means of surface forces generated by said electrical field together with capacitive effects, and finally, thermal or radiation curing under a protective atmosphere.

With regard to claim 13, Wong neither discloses nor suggests a process for manufacturing super capacitors or quantum batteries storing electrical energy and resonance excited, crystalline, chemically dipolar nano-particles separated by an electrically insulating material including the steps of providing a carrier surface; alternately depositing a layer of nano particles and a layer of insulating material onto the surface by means of chemical or physical vapor deposition in order to obtain a sandwich structure wherein the layers overlap each other; and annealing the sandwich structure at a temperature of above 800° for achieving a Rutile type

crystal phase, wherein the layers do not delaminate due to the different thermal expansion coefficients.

Additional limitations found in dependent claims 11, 12 and 14-18 are also nowhere disclosed or suggested in the applied prior art.

New independent claim 19 is directed to a super capacitor or quantum battery based on the physical effect of the very small particles of a strong bipolar crystal material separated by an insulating media and under the stress of a strong electrical field and at a critical voltage become conductive by means of virtual photon resonance, whereby the particles during a short time extremely concentrate the homogeneous electrical field locally such that very fast and loss free exchanges of charges are provoked causing Dirac current pulses at constant voltages, the particles thereby taking up energy which is stored. Wong is concerned with new epoxy-ceramic material compositions with high dielectric constants suitable for use in forming capacitors. Wong neither discloses nor suggests the claimed subject matter claimed here.

It is respectfully submitted that new claims 10-19 are now in condition for immediate allowance and early passage to issue is requested. In the event, however, any small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

Please ensure that the claims as amended herewith are published with the application.

EISENRING
Appl. No. 10/519,491
July 18, 2006

The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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